

IN THE CLAIMS

This listing of claims replaces all prior listings:

1. (Currently Amended) An electropolishing apparatus comprising:
a polishing surface plate including a cathode and turnably disposed;
a polishing pad disposed on said polishing surface plate, to be impregnated with an electropolishing liquid, and showing electric conduction from the face side to the back side thereof in the state of being impregnated with said electropolishing liquid;
a substrate holding unit for holding a work substrate with a work surface of said work substrate opposed to a polishing surface of said polishing pad, said substrate holding unit turnably disposed at a position opposed to said polishing pad, an outer circumferential portion of said work surface disposed outside of said polishing surface of said polishing pad;
an anode to be brought into contact with said work surface of said work substrate held by said substrate holding unit;
a chemical liquid supply unit for supplying a chemical liquid used for polishing onto said polishing pad onto a substantially central portion of said polishing pad so that said chemical liquid impregnates said polishing pad while moving in an outer circumferential direction of said rotating polishing pad; and
a power source for supplying electric power between said cathode and said anode.
2. (Previously Presented) The electropolishing apparatus as set forth in claim 1, wherein said chemical liquid supply unit comprises:
a chemical liquid control unit for individually controlling the quantities of said electropolishing liquid, free abrasive grains, and pure water supplied; and
at least one unit for supplying said electropolishing liquid, said free abrasive grains, and pure water in the quantities controlled by said chemical liquid control unit.
3. (Original) The electropolishing apparatus as set forth in claim 1, further comprising:

a cup for receiving a chemical liquid discharged from the top of said polishing pad, said cup provided around the side periphery of said polishing surface plate and on the bottom side of said polishing surface plate, and

a chemical liquid discharge unit provided in said cup at a position lower than said polishing surface plate.

4. – 6. (Cancelled)